

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for protecting aircraft operation at all times while an aircraft is in service, the aircraft having a pilot-operated control system to operate aircraft flight and taxi controls and an on-board autopilot coupled to the control system to automatically operate the aircraft flight and taxi controls, the system for protecting aircraft operation comprising:

an anti-crash system on the aircraft that automatically prevents an and without human intervention transmits commands to prevent the aircraft from colliding with other objects crashing into the ground and objects on the ground and in the air;

an auto-controlling and piloting system, receiving on the aircraft that receives the commands from said the anti-crash system and is configured to prevent control by ground-based remote control the pilot-operated control system, and the on-board autopilot, the auto-controlling and piloting system overriding the pilot-operated control system and the autopilot to control movement of the aircraft on the ground and in the air;

a monitoring device system communicating with said anti-crash anti-crash system;
and

an authorities security aircraft flight equipment computer communicating with said anti-crash system, said auto-controlling and piloting system, and said the monitoring system;
and

a secondary aircraft controller system on board the aircraft and coupled to the auto-controlling and piloting system for controlling the aircraft flight and taxi controls independent of the pilot-operated controls and the on-board autopilot.

2. (Currently Amended) The system of claim 1, ~~wherein the anti-crash system protects the aircraft from crashing into the ground and objects on the ground and in the air~~ further comprising an authorities security aircraft flight equipment system remote from the aircraft communicating with the anti-crash system and the auto-controlling and piloting system and the monitoring system.

3. (Currently Amended) The system of claim 2, wherein the anti-crash system only allows the aircraft to operate on a course set by ~~the~~ proper authorities before lift off.

4. (Currently Amended) The system of claim 2, further comprising an anti-crash system installed in a ground-based object that sends no-fly zone information comprising distance and height signals to the anti-crash system on the aircraft; and signals causing the aircraft to avoid the ground-based object or other objects.

5. (Currently Amended) The system of claim 1, ~~wherein the~~ comprising an anti-crash system installed in the a ground-based object ~~allows that is configured to allow proper~~ authorities to authorize changes in the course of the aircraft from the ground in emergency or crisis situations.

6. (Currently Amended) The system of claim 1, wherein the monitoring device system comprises an on-demand monitoring device system that is configured to automatically engage simultaneously when a problem is detected, ~~and the on-demand monitoring system allows enabling~~ authorities to monitor ~~on-board~~ on-board sensors.

7. (Previously Presented) The system of claim 6, wherein the on-demand monitoring device system includes a live feed of video and audio from the aircraft to a remote ground-based system.

8. (Currently Amended) The system of claim 3, wherein a course set before lift off in the aircraft can be changed during flight only by use of the ~~anti-crash~~ authorities security aircraft flight equipment system installed in ~~the~~ a ground-based object by multiple authorities entering multiple codes.

9. (Previously Presented) The system of claim 8, wherein the multiple codes are changed on a random basis to ensure that only authorized authorities can change a course or take control of an aircraft.

10. (Previously Presented) The system of claim 1, wherein the auto-controlling and piloting system allows authorities to authorize the operation of the aircraft in the event of pilot or crew member inability to safely pilot the aircraft due to any reason.

11. (Currently Amended) An aircraft protection system for use at all times while an aircraft is in service, the aircraft having a control system to operate aircraft flight and taxi controls and an onboard autopilot coupled to the control system to automatically operate the aircraft flight and taxi controls, the system for protecting aircraft operation comprising:

an on-board monitoring system configured to monitor the aircraft and to transmit communication signals responsive thereto;

an anti-crash control system ~~that~~ on board the aircraft and coupled to the monitoring system and responsive to the communication signals to automatically ~~prevents and~~ without human intervention transmit commands to prevent the aircraft from crashing into ~~objects~~ any object;

an auto-controlling and piloting system ~~receiving~~ on board the aircraft that receives the commands from the anti-crash system and ~~configured to prevent~~ prevents control by ~~ground-based remote control and of the aircraft~~ by the on-board autopilot, the auto-controlling and piloting system overriding the autopilot to control movement of the aircraft on the ground and in the air;

a monitoring device system communicating with the anti-crash system;

a secondary aircraft controller system on board the aircraft to control the aircraft flight and taxi controls in response to the auto-controlling and piloting system; and

an-authorities' authorities security aircraft flight equipment computer remote from the aircraft that communicates communicating with said-the anti-crash system, said-the auto-controlling and piloting system, and said-the monitoring system; and

a secondary aircraft controller system.

12. (Currently Amended) The system of claim 11, wherein the anti-crash control system comprises an input for receiving a-the communication signal from the monitoring device-system and an output coupled to the auto-controlling and piloting system and secondary aircraft controller system, the anti-crash control system configured to assume control of the aircraft upon receipt of the communication signal and prevent control of the aircraft by-the aircraft control devices-system and the on-board autopilot in the aircraft-cockpit.

13. (Currently Amended) An aircraft flight management system comprising:
an aircraft control and communication module configured to be coupled to an aircraft control system that is secondary to existing aircraft electronic flight controls and electronic engine controls and adapted to receive electronic communication signals from ground-based and air-based facilities, including air-based facilities on the aircraft, the module including an anti-crash system that detects impending crashes with objects and sends an electronic command signal to an auto-controlling and piloting system to automatically override aircraft flight and engine control commands from a cockpit of the aircraft without any human intervention, and configured to prevent control by unauthorized ground-based remote control and by an on-board autopilot; at all times while the aircraft is in service.

14. (Currently Amended) The system of claim 13, wherein air-based facilities comprise the module comprises sensors onboard configured to be mounted in the aircraft to detect obstructions on the ground hazardous to safe aircraft flight operations.

15. (Currently Amended) The system of claim 13, wherein ~~air-based facilities comprise the module is configured to receive communications received from other aircraft and ground-based facilities.~~

16. (Previously Presented) The system of claim 13, wherein ground-based facilities comprise governmental law enforcement and military facilities.

17. (Currently Amended) An aircraft flight management system comprising:
an aircraft control and communication module configured to be coupled to an aircraft control system that is secondary to existing aircraft electronic flight controls and electronic engine controls, the module including an anti-crash system that detects impending crashes with objects and sends an electronic command signal to an auto-controlling and piloting system, that is ~~and~~ adapted to receive electronic communication signals automatically generated from sensors in the aircraft and from ground-based and air-based facilities without any flight crew or other human intervention in the air or on the ground to override aircraft flight and engine control commands from a cockpit of the aircraft to prevent control by ~~ground-based remote control and the~~ on-board autopilot and to avoid collisions with the earth and other objects at all times while the aircraft is in service.

18. (Currently Amended) An aircraft flight management system, comprising:
a secondary control system for interconnecting-interfacing with aircraft flight control systems to enable automatic override of existing aircraft flight control commands and engine control commands from automatically-generated systems upon receipt of automatically generated air-based and ground-based transmission signals in response to commands from an anti-crash system, which commands and transmission signals are generated without any human intervention, the flight management system ~~and~~ configured to prevent control by ~~ground-based remote control and by~~ an on-board autopilot at all times while the aircraft is ~~in service~~ receiving the transmission signals.

19. (Currently Amended) An aircraft ~~flight~~-management system for an aircraft having flight and taxi controls and an on-board autopilot coupled to the flight controls, the system comprising:

a monitoring system for automatically detecting when the aircraft is on a collision course with an object or the ground and automatically generating a detection signal when a collision course with an object or the ground is detected; and

an anti-crash system coupled to the monitoring system for receiving a ~~the~~ detection signal therefrom and coupled to the autopilot and coupled to the flight control systems and taxi controls via a secondary control system on the aircraft at all times while the aircraft is in service, the anti-crash system responsive to the detection signal to send commands to an auto-controlling and piloting system on board the aircraft to automatically bypass the autopilot and control the flight path of the aircraft without any human intervention to avoid a collision with the object or the ground, the anti-crash system configured to prevent control by ~~ground-based and remote control and the on-board autopilot~~ when the anti-crash system is activated.

20. (Currently Amended) A system for protecting aircraft operation, comprising:

an anti-crash system that automatically prevents an aircraft from colliding with other objects;

an auto-controlling and piloting system, receiving commands from said anti-crash system;

a monitoring device system communicating with said ~~anti-crash~~ anti-crash system;

an authorities security aircraft flight equipment computer communicating with said anti-crash system, said auto-controlling and piloting system, and said monitoring system; and

a secondary aircraft controller system, wherein a course set before lift off in the aircraft can be changed during flight only by use of the ~~anti-crash system~~ authorities security aircraft flight equipment computer installed in the ground-based object by three separate authorities entering three separate codes.

21. (Previously Presented) The system of claim 20, wherein the three separate codes are changed on a random basis to ensure that only authorized authorities can change a course or take control of an aircraft.